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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,920	11/06/2003	Yao-Der Huang	11619-US-PA	2919

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BERKELEY LAW & TECHNOLOGY GROUP  
1700NW 167TH PLACE  
SUITE 240  
BEAVERTON, OR 97006

EXAMINER

RUDE, TIMOTHY L

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/605,920	Applicant(s) HUANG ET AL	
	Examiner Timothy L. Rude	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 7-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-162)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claims***

Claims 1-6 are amended. Claims 7-20 are added.

### ***Election/Restrictions***

Applicant's election with traverse of species B in the reply filed on 11 October 2005 is acknowledged. The traversal is on the ground(s) that species are not shown to be mutually exclusive. This is not found persuasive because Applicant's own disclosure teaches the difference between the first and second embodiments (mutual exclusivity between species A and species B) in para [0029].

The requirement is still deemed proper and is therefore made FINAL.

Claims 7-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11 October 2005. Please note that Applicant has elected species B, drawn to a back light device as shown in Figure 4 and described in the specification [0029] through [0031] that is a mesa type.

Applicant was given a courtesy specifically indicating the likelihood of restriction of claims with alternate preamble on page 4, para 2, c., of the action Mailed 06 May 2005. None of Applicant's newly added claims have limitations considered drawn to the

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elected back light device. In fact, some of Applicant's newly added claims are not even drawn to a device. Applicant may add new claims, however, they must clearly and exclusively read on the elected species or be generic to both species A and B while retaining all essential subject matter to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examination purposes, the preamble of claim 1, as amended, is considered to read on Applicant's elected back light device.

### ***Specification***

The disclosure is objected to because "liner light source" is not defined. Examples of what may read on a term do not meet the burden of lexicography for defining a term. Correction is required. See MPEP § 608.01(o).

### ***Claim Objections***

Claims 4-6 are objected to because of the following informalities: Applicant has not defined "liner light source". Appropriate correction is required. For examination purposes Applicant's "liner light source" will be considered - - linear light source - - .

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasagawa et al (Sasagawa) USPAT 6,454,452.

As to claim 1, Sasagawa discloses a light guide plate structure [back light device, entire patent, e.g., Figures 1-2B] comprising:

a light guide plate, comprising at least one light incident surface, a light scattering surface, 24, and a light emitting surface, top, wherein the light incident surface, 20, is on a sidewall of the light guide plate, the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, wherein the light scattering surface has a plurality of notches; and a plurality of transparent elements [air], disposed within the plurality of notches, wherein a reflective index of the plurality of transparent elements is different from that of the light guide plate.

A schematic diagram of a light valve array. A rectangular panel is shown with a grid of elements. An arrow labeled "LIGHT" points from the left towards the panel. Labels include "A" at the top left, "15" at the top center, "4" at the top right, "20" on the left side, and "5" at the bottom left.

As to claim 3, the light guide plate structure of claim 1, wherein the light guide plate is a mesa light guide plate, the plurality of transparent elements have different sizes, the plurality of transparent elements are disposed on the light scattering surface

at least partially in sequence by the size, and bottom surfaces of the plurality of transparent elements are substantially coplanar [Fig. 2B].

As to claim 4, Sasagawa discloses a back light guide for a display [back light device, entire patent, e.g., Figures 1-2B] comprising:

a light guide plate structure, comprising: a light guide plate, comprising at least one light incident surface, 20, a light scattering surface, 24, and a light emitting surface, top, wherein the light incident surface is on a sidewall of the light guide plate, the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, and wherein the light scattering surface has a plurality of notches, a plurality of transparent elements, air, disposed within the plurality of notches, wherein a reflective index of the plurality of transparent elements is different from that of the light guide plate; and a liner light source next to the light incident surface of the light guide plate.

As to claim 6, the back light of claim 4, wherein the light guide plate is a mesa light guide plate, the plurality of transparent elements have different sizes, the plurality of transparent elements are disposed on the light scattering surface at least partially in sequence by the size, and bottom surfaces of the plurality of transparent elements are substantially coplanar [Fig. 2B].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasagawa in view of Pelka et al (Pelka) USPAT 6,647,199 B1.

As to claims 2 and 5, Sasagawa discloses the light guide plate structure of claims 1 and 4 above.

Sasagawa does not explicitly disclose a display wherein the plurality of transparent elements comprises a glass or an acrylic material.



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Pelka teaches that use of acrylic is known to be a preferred material for use in the making of light guide plates [col. 6, lines 26-36] and Pelka teaches that transparent scattering elements can be made of any transparent material that has an index of refraction different from that of the light guide [col. 9, lines 28-32].

Pelka is evidence that workers of ordinary skill in the art would find the reason, suggestion, or motivation to add a plurality of transparent elements comprising a glass and/or an acrylic material as art recognized equivalents for the same purpose of forming a transparent scattering element with satisfactory performance in a back light device [MPEP 2144.06].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Sasagawa with the plurality of transparent elements comprising a glass and/or an acrylic material of Pelka as an art recognized equivalents for the same purpose of forming a transparent scattering element with satisfactory performance in a back light device.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

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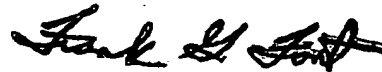
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



tlr

Timothy L Rude  
Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800